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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/269,618	07/21/1999	RICHARD BILLINGSLEY	DYOUP0185US	1326

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EXAMINER
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REAGAN, JAMES A

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/269,618

Applicant(s)

BILLINGSLEY, RICHARD

Examiner

James A. Reagan

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-48,51-53,61-63,65-69 and 74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-48,51-53,61-63,65-69 and 74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Status of Claims**

1. This action is in response to the amendment received on 02 December 2004.
2. Claims 1, and 61-63 have been amended.
3. Claims 2, 49, 50, 54-60, 64, and 70-73 have been cancelled.
4. Claims 1, 3-48, 51-53, 61-63, 65-69, and 74 have been examined.

### **Previously Indicated Allowable Subject Matter**

5. Claims 52 and 53 were previously indicated as allowable. However, continued searching on the part of the Examiner has revealed prior art that may be applied against the allowable feature of claims 52 and 53.

## **RESPONSE TO ARGUMENTS**

6. Applicant's arguments received on 20 April 2004 have been fully considered but they moot based on the new grounds of rejection.

### **Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-48, 51-53, 61-63, 65-69, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen (US 5,898,154 A) in view of Hiroya et al (US 5,754,654 A), and further in view of Schneier (Applied Cryptography), and further in view of O'Mahony, "Electronic Payment Systems" (c) 1997.

**Examiner's note:** Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the *entire* reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

**Regarding claims 1, 10, 12, 13, 28, 52, 53, and 61-63.**

Hiroya et al. teach an electronic ticket vending system such that Applicant's value note reads on the electronic ticket storage device, Applicant's first information reads on PTi, Applicant's second information reads on the ticket information, 610, and Applicant's step of calculating third information (RSA type signature – asymmetric encryption algorithm) reads on STk and column 15, lines 38 - 44. Rosen teaches an electronic monetary system such that Applicant's value note reads on element 11, Applicant's bearer's public key information (first information) reads on the identifier for money generator module, element 6, Applicant's information representative of a commodity (second information) reads on the type of note (credit or currency), Applicant's issuer's signature and issuer's public key information reads on the issuing bank's identifier and column 14, lines 6 - 14, Applicant's redemption instruction

information reads on column 19, lines 30 - 65 (Body group of data fields) and Applicant's bearer's signature reads on the digital signature of the Money Generator module, element 6 and columns 19 and 20, lines 54 - 67 and lines 1 - 4, respectively. Schneier discloses reversing the traditional procedure of using public and private keys for encryption/decryption as well as using PKI for digital signatures (pages 37-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hiroya/Rosen/Schneier because utilizing the public key encryption and digital signatures provides a secure and efficient method of transferring valuable digital objects.

In addition, Applicant's method of handling a value note reads on Hiroya et al's refunding a purchased ticket, columns 19 - 20. Applicant's providing redemption instruction information reads on the message VR and Applicant's providing a bearer's signature reads on column 20, lines 24 - 28 and column 1, lines 37 - 42 (RSA type signature - asymmetric encryption algorithm). RSA is considered inherent to public key cryptography used by Rosen. See also Rosen figure 51 and column 20, beginning at line 14, through column 22, line 57, approximately.

The combination of Hiroya/Rosen/Schneier discloses the system as shown above. Hiroya/Rosen/Schneier do not specifically address blind character strings or redemption instructions. O'Mahony, however, in at least pages 48-50 discloses Blind signatures, and in section 2.3, discloses the emergence of issuing credit cards to local customers in 1947, inherently disclosing that customers need to be explained how to utilize the new credit tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hiroya/Rosen/Schneier because the features regarding the proper use and security of credit and virtual money stem from age old practices begun when non-traditional forms of spending cash evolved into mainstream consumer society.

**Regarding claims 3, 4, 8 and 9:**

Applicant's step of providing reads on the day and time of the event. It is inherent to this event day and time information that the ticket will expire (or become invalid) after that day. See also Rosen Figure 51.

**Regarding claims 5 - 7:**

Applicant's identification information reads on transaction serial number included in the ticket information, 610. See also Rosen, columns 19 - 20, lines 54 - 67 and 1 - 4, respectively.

**Regarding claim 11:**

Applicant's electronic public communication system reads on the public telephone system. See also Rosen element 1, element 4 and figure 3, and Applicant's network reads on column 2, lines 57 - 65.

**Regarding claims 14 and 26:**

Applicant's method of handling a value note reads on Hiroya et al's refunding a purchased ticket, columns 19 - 20. Applicant's providing redemption instruction information reads on the message VR and Applicant's providing a bearer's signature reads on column 20, lines 24 - 28 and column 1, lines 37 - 42 (RSA type signature - asymmetric encryption algorithm). RSA is considered inherent to public key cryptography used by Rosen. See also Rosen figure 51 and column 20, beginning at line 14, through column 22, line 57, approximately.

**Regarding claim 15:**

Applicant's value note reads on the electronic ticket storage device, Applicant's first information reads on PT1i, Applicant's second information reads on the ticket information, 610, and Applicant's step of calculating third information reads on STk and column 15, lines 38 - 44.

**Regarding claims 16 and 17:**

Applicant's step of calculating the signature based on information including the redemption instruction information reads on column 20, lines 52 - 57.

**Regarding claim 25:**

Applicant's identification reference reads on Hiroya's the transaction number.

**Regarding claims 18 - 25 and 51:**

Applicant's redemption instruction information reads on Rosen figure 51 and column 20, beginning at line 14, through column 22, line 57, approximately.

**Regarding claim 27:**

Applicant's electronic public communication system reads on the public telephone system.

**Regarding claim 29:**

Applicant's plurality of value notes reads on the situation of Hiroya et al when there is more than one ticket on the device and a bearer wishes to receive a refund of more than one ticket.

**Regarding claim 30:**

Applicant's value note reads on the electronic ticket, Applicant's first information reads on PT1 i, Applicant's second information reads on the ticket information, 610, and Applicant's third information reads on column 20, lines 52 - 57. Applicant's providing redemption instruction information reads on the message VR and Applicant's providing a bearer's signature reads on column 20, lines 24 - 28.

**Regarding claims 31 and 32:**

Applicant's receiving information without a value note reads on the ticket information, VR, that is transmitted to the vending and refunding device from the ticket device and containing the message R. initially sent by the vending and refunding device message R is the same as that of the vending and refunding device. See column 20, lines 39 - 57.

**Regarding claims 33 - 35:**

Applicant's step of verifying that the note was not previously presented for redemption reads on verifying the ticket information (transaction number). If the transaction number was presented to the vending and refund device a second time, the transaction number would not be found in the history and no second refund could be given to the ticket device.

**Regarding claim 36:**

Applicant's counter signature reads on the publisher's signature.

**Regarding claim 37:**

Applicant's endorsement signature reads on the publisher's signature.



**Regarding claim 38:**

Applicant's expiry information reads on the date and time of the event. Applicant's testing reads on the determination by the vending and refunding device that the event has not passed before giving a refund.

**Regarding claim 39:**

Applicant's valid-from information reads on the inherent information of the purchase date and the event date; i.e., the ticket will only be valid for a refund (redeemed) after the purchase date and before the event date.

**Regarding claims 40 - 43 and 46:**

Applicant's redemption instruction information reads on Rosen figure 51 and column 20, beginning at line 14, through column 22, line 57, approximately.

**Regarding claim 44:**

Applicants' step or issuing replacement notes reads on Rosen columns 51 and 52, lines 65 - 67 and 1 - 12, respectively.

**Regarding claim 45:**

Applicant's different bearer's public key reads on Rosen column 37, line 48 - 55 wherein "A" represents the bearer of money generating module "A".

**Regarding claims 47 and 48:**

Applicant's step of communicating each value not electronically to a remote party corresponding to the source of the value note reads on communicating with the issuer via the network of Rosen.

**Regarding claims 65, 67 and 68:**

Applicant's step of providing a list of identification information and redemption requests and step of providing a bearer's signature reads on Rosen columns 12 - 13, lines 49 - 67 and lines 1 - 36.

**Regarding claim 66:**

Applicant's one redemption request including a request to issue a new value note is considered inherent to the system of Rosen; i.e., when the value of the transfer amount is less than the value of the note, a new note will be issued to reflect the difference. See also column 20, lines 5 - 14.

**Regarding claim 69:**

Applicant's money handling authority reads on Rosen element 28.

**Regarding Claim 74:**

Applicant's bank terminal reads on Rosen element 1, Applicant's user terminal reads on element 3, and Applicant's network reads on element 4. See Figure 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **James A. Reagan** whose telephone number is **(703) 306-9131**. The examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **James Trammell** can be reached at (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks**

**Washington, D.C. 20231**

or faxed to:

**(703) 305-7687** [Official communications; including

After Final communications labeled "Box AF"]

**(703) 308-1396** [Informal/Draft communications, labeled "PROPOSED"

or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

JAR

10 February 2004

